

Russian Journal of Organic Chemistry 2015 vol.51 N9, pages 1264-1267

Phosphoryl- and thiophosphoryl-functionalized enamino ketones. Polarity and conformational analysis

Vereshchagina Y., Alimova A., Chachkov D., Khanafieva R., Kozlov V., Ishmaeva E.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2015 Pleiades Publishing, Ltd. The polarity and conformational behavior of some phosphorus-containing enamino ketones have been determined by the dipole moment method, IR spectroscopy, and quantum chemical calculations. 3-[-[(Diphenylphosphoryl)methyl]phenylamino]-1-phenylprop-2-en-1-one has been found to exist as the single Z isomer. 3-[2-(Diphenylphosphoryl)phenylamino]-1-phenylprop-2-en-1-one and 3-[2-(diphenylphosphorothioyl) phenylamino]-1-phenylprop-2-en-1-one exist in equilibrium between the Z and E isomers, the latter prevailing.

<http://dx.doi.org/10.1134/S1070428015090080>
